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GROWTH OF PRUNED WHITE PINE

By

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Indications that live pruning, which has little or no effect on the height growth of white pines, will reduce diameter growth when too large a percentage of the living crown is removed, have resulted from a study now being made by the Appalachian Forest Experiment Station on the Toccoa Experimental Forest, Union County, Georgia.

White pines ranging from 16 - 20 years of age, from 2 - 7 inches in diameter at breast height, and from 15 - 48 feet high were used in the experiment, 90 trees being treated in each of the four ways listed below:

1. Check trees - no pruning

2. Light pruning - 6 to 15 percent of the living branch whorls removed

3. Moderate pruning - 16 to 25 percent of the living whorls removed

4. Heavy pruning - 26 to 35 percent of the living whorls removed

Prior to the growing season of 1936 and just before pruning was done, the diameter (at breast height) and total height of each tree were recorded. These measurements were repeated two growing seasons later.

The average growth, during that period, of the trees treated in each of the four ways is given below. The figures have been adjusted to allow for differences in diameter, height and crown ratio[1/] between the trees at the beginning of the experiment.

1/ The ratio of the crown length to the total height of a tree.

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